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Subject:

Sludge Removal Area 9 (SR-9) Ringwood Mines/Landfill Site, Ringwood, New Jersey

Dear Mr. Gowers:

ARCADIS G&M, Inc. (ARCADIS), on behalf of the Ford Motor Company (Ford), is submitting this technical memorandum on the surficial paint sludge removal activities in SR-9 at the Ringwood Mines/Landfill Site, Ringwood, New Jersey.

This letter summarizes the post excavation analytical results and confirms the effectiveness of the removal work. Based on the confirmatory analytical results, the soil remaining in SR-9 does not exceed New Jersey Department of Environmental Protection (NJDEP) Residential Soil Contact Standards (SCS).

## **Background**

Surficial paint sludge was observed along Hope Mountain Road approximately one-half mile north of Peter's Mine Pit. This area was designated as SR-9. Removal activities were conducted in the SR-9 area from approximately March 2006 through February 2007. Approximately 2,400 cubic yards of material was removed from the area.

## **Confirmatory Sampling**

Side wall post-excavation samples were collected for VOCs, SVOCs, Metals, and PCBs at a frequency of approximately 1 sample for every 32 linear feet of excavation side wall. Post-excavation bottom samples were collected for the same parameters at a frequency of approximately one sample for every 900 square feet of excavation bottom area. Post-excavation sample locations were biased to locations and intervals expected to have the greatest potential for impact based on removal field observations. This resulted in twenty five side wall locations (two of which required additional soil removal and subsequent re-sampling) and eighteen bottom samples (three of which required additional soil removal and subsequent re-sampling). The

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Date:

April 13, 2007

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NJ000604

ARCADIS

Joseph A. Gowers
April 13, 2007

post-excavation sample locations and analytical results are shown on Drawings 2-SR-9 and 4-SR-9, attached.

Four post-excavation samples (PE-04, PE-13, PE-14, and PE-04B) contained lead at concentrations greater than the NJDEP SCS (400 mg/kg), and one post-excavation sample (PE-08) contained beryllium at a concentration greater than the SCS for that constituent (2 mg/kg). These locations were subsequently excavated and the remaining soil re-sampled. Results of post-excavation sampling indicated that soil at these locations (identified as PE-07, PE-13A, PE-14A, and PER-4B) met the NJDEP SCS.

## Conclusions

Based on the analytical results, concentrations of VOCs, SVOCs, Metals, and PCBs in the remaining soils do not exceed NJDEP residential direct-contact standards. Post-excavation sampling results confirm the effectiveness of the removal work, and ARCADIS requests approval for the backfill and restoration of SR-9 to proceed.

Please feel free to contact me if you have any questions or require additional information.

Sincerely,

ARCADIS G&M, Inc

Erich Zimmerman, PE Project Manager

Copies:

K. Petrone (NJDEP)

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